



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,079	02/26/2002	Dominik Schutz	TRW(ASG)6052	4699

26294 7590 11/01/2004

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
526 SUPERIOR AVENUE, SUITE 1111
CLEVEVLAND, OH 44114

EXAMINER

LUONG, VINH

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,079

Applicant(s)

SCHUTZ, DOMINIK

Examiner

Vinh T Luong

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 14 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



Vinh T. Luong
Primary Examiner

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: Attachments # 1 and 2.

Art Unit: 3682

1. The Amendment filed on October 16, 2004 has been entered.
2. The drawings were received on October 16, 2004. The Examiner accepts these drawings.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-4, 6-11, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Bohn et al. (EP 0 945 310 A2 which is cited by Applicant and corresponds to US Patent No. 6,312,012 B1.)

The Examiner respectfully submits that in the rejection below, the Examiner refers to Pat.'012 for convenience since it is in English. The rejection is based on EP 0 945 310 A2 because the publication date of EP'310 (September 29, 1999) was earlier than the publication date of Pat.'012 (November 6, 2001).

Regarding claim 1, Bohn teaches a vehicle steering wheel having an axis, said steering wheel comprising:

a skeleton 1-3 embedded in a foam casing 4; and

a covering cap 6 having an edge 24 (Fig. 1), said covering cap 6 for actuation of a horn (see lines 29-41, column 1 of Pat.'012) being mounted so as to be *displaceable* in an axial direction (see lines 10-20, column 4 of Pat.'012), said foam casing 4 of said skeleton 1-3 adjoining said edge 24 of said covering cap 6;

a gas bag module 5 including a housing 17, said housing 17 being open towards said covering cap 6 and adapted to receive a gas bag 16, said housing 17 having an electrical contact 18 *displaceable* with said covering cap 6 for a predetermined distance in said axial

Art Unit: 3682

direction into contact with a corresponding electrical contact 14 disposed on said steering wheel;
and

a plurality of guides 10 or 10, 26 for guiding displacement of said covering cap 6, said guides 10 or 10, 26 being provided in a region 24 of said edge 24 of said covering cap 6 (Fig. 1), said guides 10 or 10, 26 being arranged and elastically mounted such that upon laterally pressing down said covering cap 6 for said predetermined distance by a force *suitable* for actuating said horn, said guides 10 or 10, 26 are tilted by an amount allowed by a yielding of said foam casing 4.

Claim 1 and other claims below are anticipated by Bohn since Bohn teaches each positive claimed element. On the one hand, note that the term, such as, “*displaceable*” is a relative term, particularly since virtually any thing will be displaced if enough force or pressure is applied to it. See “flexible” or “flexibility” in *Fredman v. Harris-Hub Co., Inc.*, 163 USPQ 397 (DC NIII 1969). On the other hand, Applicant’s recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then, it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Regarding claim 2, a gas bag module 5 is provided which is closed by said covering cap 6 and which together with said covering cap 6 is mounted so as to be *displaceable* in said axial direction, said guides 10 or 10, 26 being connected with said gas bag module 5. See line 5 *et seq.*, column 3 of Pat.’012.

Art Unit: 3682

Regarding claim 3, said housing 17 is cup-shaped which is open towards said covering cap 6 and adapted to receive said gas bag 5, an edge of said receiving housing 17 has extensions 17 (Attachment # 1) projecting laterally outwards and towards said edge of said covering cap 6, said guides 10 or 10, 26 are provided on said extensions 17.

Regarding claim 4, said guides 10 or 10, 26 are bolts 10 or 10, 26, which are formed in one piece on said receiving housing 17.

Regarding claim 6, a detent connection 29 is provided between said skeleton 1-3 and said gas bag module 5 to support said gas bag module 5. See line 49 *et seq.*, column 3 of Pat. '012.

Regarding claim 7, restoring springs 15 are provided, said guides are bolts 10 or 10, 26 which extend through said restoring springs 15.

Regarding claim 8, bearing bushes 13 are provided, said guides are bolts 10 or 10, 26 which are inserted in said bearing bushes 13, said bearing bushes 13 are fixedly mounted on said bolts 10 or 10, 26 in said axial direction and are pressed into said foam casing 4.

Regarding claim 9, said guides 10 or 10, 26 are received in said covering cap 6 so as to inherently have no lateral play (Figs. 1-3).

Regarding claim 10, said module 5 has a front side and said covering cap 6 covers said module 5 entirely on said front side (Figs. 1 and 2).

Regarding claim 11, said guides 10 or 10, 26 are not directly connected with each other as seen in Fig. 2.

Regarding claim 13, Bohn teaches a steering wheel having an axis, said steering wheel comprising:

a skeleton 1-3 embedded in a foam casing 4, said foam casing 4 having a plurality

Art Unit: 3682

of recesses 9;

a covering cap 6 having an edge 24 (Fig. 1), said covering cap 6 for actuation of a horn, being mounted so as to be *displaceable* in an axial direction, said foam casing 4 of said skeleton 1-3 adjoining said edge 24 of said covering cap 6;

a gas bag module 5 including a housing 17, said housing 17 being open towards said covering cap 6 and adapted to receive a gas bag 16, said housing 17 having an electrical contact 18 *displaceable* with said covering cap 6 for a predetermined distance in said axial direction into contact with a corresponding electrical contact 14 disposed on said steering wheel; and

a plurality of guides 10 or 10, 26 for guiding displacement of said covering cap 6, said guides 10 or 10, 26 being provided in a region 24 of said edge 24 of said covering cap 6, said guides 10 or 10, 26 being arranged and elastically mounted such that, upon laterally pressing down said covering cap 6 for said predetermined distance by a force *suitable* for actuating said horn, said guides 10 or 10, 26 are tilted by an amount allowed by a yielding of said foam casing,

each of said guides 10 or 10, 26 being arranged for axial movement in a corresponding one of said plurality of recesses 9 of said foam casing 4.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as obvious over Bohn et al. (EP 0 945 310 A2 cited by Applicant).

Bohn teaches to form the guides of suitable synthetic material in order to be able to take up the reaction forces occurring on actuation of the gasbag. See lines 21-31, column 4 of Pat.'012. Plastic is a notoriously well-known material in the art of steering wheel as evidenced by Bohn's teachings. See *In re Leshin*, 125 USPQ 416 (CCPA 1960) and MPEP 2144.07. To

Art Unit: 3682

form the housing of plastic is considered as an extension of Bohn's suggestion of the use of plastic material for the guides to be able to take up the reaction forces occurring on actuation of the gas bag.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to form both Bohn's receiving housing and guides of plastic in order to be able to take up the reaction forces occurring on actuation of the gas bag as suggested by Bohn.

6. Claims 12 and 14 are allowed.

7. As allowable subject matter has been indicated, Applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

8. Applicant's arguments filed October 16, 2004 have been fully considered but they are not persuasive.

At the outset, Applicant states:

“Bohn does not disclose that upon laterally pressing down a covering cap for a predetermined distance by a force suitable for actuating a horn, guides are tilted by an amount allowed by a yielding of a foam casing. A person of ordinary skill in the art would recognize that flange 11 and screw 12 of Bohn prevent tilting and axial movement of bolt 10 of Bohn. Accordingly, Bohn does not disclose the guides recited in claim 1.”

The Examiner respectfully submits that 35 USC § 102 reference needs not provide such explanation to anticipate when an artisan would know as evidenced by standard text book. *In re Opprecht*, 12 USPQ2d 1235 (CAFC 1989). Further, it is well settled that anticipation law requires distinction be made between invention described or taught and invention claimed. It does not require that the reference “teach” what subject patent application teaches, it is only

Art Unit: 3682

necessary that the claim under attack, as construed by the Court, “*read on*” something disclosed in the reference, *i.e.*, all limitations of the claim are found in reference, or are “*fully met*” by it. *Kalman v. Kimberly Clark Corp.*, 218 USPQ 781, 789 (CAFC 1983).

In the instant case, Bohn does not need to provide such explanation to anticipate when an artisan would know as evidenced by standard text book that if a sufficient force is applied to the cover cap 6 of Bohn et al., the bolts 10 will inherently tilt since virtually any thing will be tilted, displaced, or collapsed if enough force or pressure is applied to it. See *Fredman v. Harris-Hub Co., Inc.*, *supra*. In fact, *Webster's II New Riverside University Dictionary* defines: “tilt: to forge with a tilt hammer.” If one uses a tilt hammer to hit on Bohn’s casing 6 in the direction F shown in the Attachment # 1, the stud 10 inherently is tilted or displaced based on ordinary and customary meaning of the term. Especially, note that Bohn’s guides 10 in Bohn’s second embodiment of Bohn’s Fig. 2 are embedded in the foam casing 4 in the same manner as Applicant’s guides 32 embedded in Applicant’s foam casing 12, therefore, Bohn’s guides 10 inherently behave similarly as Applicant’s guides. See *In re King*, 231 USPQ 136 (CAFC 1986) and *In re Merk & Co., Inc.*, 231 USPQ 375 (CAFC 1986)(similar structures would behave similarly).

On the other hand, if a person of ordinary skill in the art would recognize that flange 11 and screw 12 of Bohn prevent tilting and axial movement of bolt 10 of Bohn as Applicant alleges, said person of ordinary skill would also recognize that Applicant’s flange and screw (or the like as shown in Attachment # 2) prevent tilting and axial movement of Applicant’s bolt 32.

Second, Applicant contends: “[t]o use a tilt hammer on a steering wheel does not constitute a common custom and thus, cannot define to handling gas bag modules and actuating

Art Unit: 3682

the horn in a steering wheel. The more appropriate and common meaning of 'to tilt' for the instant application is: 'to cause to slope or to move or shift so as to lean or incline,' see *Webster's third new International Dictionary*."

However, Applicant's claims 1 and 13 do not preclude the situation of using a tilt hammer on the steering wheel. As such, Applicant's arguments are not based on the limitations appearing in the claims. Moreover, Fig. 2 of Bohn shows that one can use the hand to push the guides 10 downwardly in order to cause Bohn's guides 10 to slope or to move or shift so as to lean or incline. Therefore, Bohn's guides 10 "read" on Applicant's claims.

Third, Applicant asserts: "[a]dditionally, the amendment filed on July 30, 2003 cited in the Office Action should not be interpreted as an admission that the bolts in Bohn tilt. The emphasis made by the Office Action refers to the mounting tab 17 of Bohn, which is placed on the head of the bolt 10 and can tilt around the bolt 10. However, the bolt is still in a fixed axial direction and provides a fixed abutment for the mounting tab 17 to tilt about."

In the Amendment filed on July 30, 2003, Applicant stated:

The patent to Bohn et al. discloses that mounting tab 17 with dished recess 19 has a through hole 20 whose diameter is larger than the outer diameter of the mounting stud 10. This clearance is to aid in placement of the module into the foam. (Bohn et al. col. 3 lines 12-15). The patent to Bohn et al. also discloses that the mounting plate 30, (part of mounting tab 17) is the same in Figs. 1 and 2 and that the horn contacts located on the mounting tab 17 may be depressed parallel to the steering wheel axis or may be tilted to actuate the horn switch. (Bohn et al. col. 3 lines 42-46).

The clearance space created by through hole 20 between mounting tab 17 and the mounting stud precludes any transfer of movement from the mounting tab to the stud 10. Thus, the stud 10 of Bohn et al. is not tilted during actuation of the horn switch.

Even if a large force is applied to the cover cap of Bohn et al., the bolts 10 will not inherently tilt. The cover cap wall 25 at the upper portion of bolt 10 will yield before the bolts will tilt. The cap will yield before the bolts will tilt because the bolts are stabilized against tilting by virtue of a relatively large surface area contact between the flange 11 on bolt 10 and the adjacent foam plateau compared with the small surface area contact between the thin walled section 25 of cover cap and the top section of the bolt 10. Thus, claim 1 should be allowed.

The Examiner sees no reason why Applicant's statements in the previous amendment should not be accepted at face value as admissions that the bolts of Bohn will tilt under the situations described by Applicant. *Cf., In re Nomiya*, 184 USPQ 607 (CCPA 1975).

Fourth, Applicant contends that the bolt is still in a fixed axial direction and provides a fixed abutment for the mounting tab 17 to tilt about. However, Fig. 2 of Bohn shows that the guide 10 is projected out of the tab 17. Therefore, the guide 10 is tilted with the tab 17 as shown in Bohn's Fig. 2 and as Applicant admitted in the Amendment filed on July 30, 2003.

Fifth, Applicant asserts that Bohn, col. 3, lines 42-26, discloses that the tab 17 may be tilted, not the bolts. Nevertheless, since the bolt 10 is mounted on the tab as shown in Fig. 2 and described in col. 2, line 65 through col. 3, line 31, thus, when the tab 17 is tilted, the bolt is tilted therewith. In other words, Bohn implicitly describes that the bolts may be tilted with the tab. *In re Opprecht, supra*.

Sixth, Applicant avers that the fact that Bohn's casing is made of foamed material does not necessarily imply that it is flexible enough so that the bolts 10 provided with an extremely large area of contact and braced against movement by a screw 12 will move a noticeable amount when force is transmitted to them by pressing on the covering cap 6 to actuate the horn.

Nevertheless, Applicant's bolts 32 are also provided with an extremely large area of contact and braced against movement by a screw or the like at their outermost ends as seen in Attachment # 2. Therefore, if one applies sufficient force on Bohn's cap 6 at the head areas of Bohn's bolts 10, the bolts 10 will move or tilt as admitted by Applicant in the Amendment filed on July 30, 2003. In other words, Bohn's casing is made of foamed material does necessarily imply that it is flexible enough so that the bolts 10 provided with an extremely large area of contact and braced against movement by a screw 12 will move a noticeable amount when force is transmitted to them by pressing on the covering cap 6 to actuate the horn. *In re King* and *In re Merk & Co., Inc., supra*.

Seventh, Applicant states that Bohn's casing 6 and guides 10, 26 are not integrally connected. Contrary to Applicant's remarks, the term "integral" is not necessarily restricted to one-piece article. "Integral" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326 (CCPA); *In re Morris*, 43 USPQ2d 1753, 1757 (CAFC 1997); and *In re Kohno*, 157 USPQ 275 (CCPA). Therefore, Bohn's casing 6 and guides 10, 26 are integrally connected within the meaning of patent law.

Eight, Applicant avers that Bohn's flange 11 and screw 12 secure the bolt 10 against the movement, meanwhile, Applicant's Fig. 5 shows that the bushing 42 extends only a short part over the recess 50. However, patent drawings are not drawn on scale. Therefore, absent any written description in the reference specification of quantitative values, Applicant's arguments based on measurement of a drawing are futile. *In re Wright*, 193 USPQ 332, 335 (CCPA 1977).

Finally, Applicant contends that when Bohn's edge 24 of the covering cap 6 is depressed, the sleeve 25' will tilt without tilting the bolt 10, 26. This contention is apparently in conflict

Art Unit: 3682

with the law of physics. In fact, Bohn's Fig. 3 shows that when Bohn's edge 24 of the covering cap 6 is depressed, the sleeve 25' will tilt and the bolt 10, 26 will be tilted therewith because the head of the bolt is within the sleeve 25'. Therefore, Bohn's blot is guided by Bohn's sleeve 25. In the same manner, Applicant's bolt 32 is guided by Applicant's sleeve as seen in Figs. 4a and 4b of Attachment # 2.

For the foregoing reasons, claims 1-11 and 13 stand rejected over Bohn.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Vinh T. Luong whose telephone number is 703-308-3221. The Examiner can normally be reached on Monday, Tuesday, Thursday, and Friday.

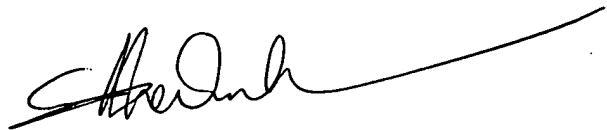
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, David Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3682

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

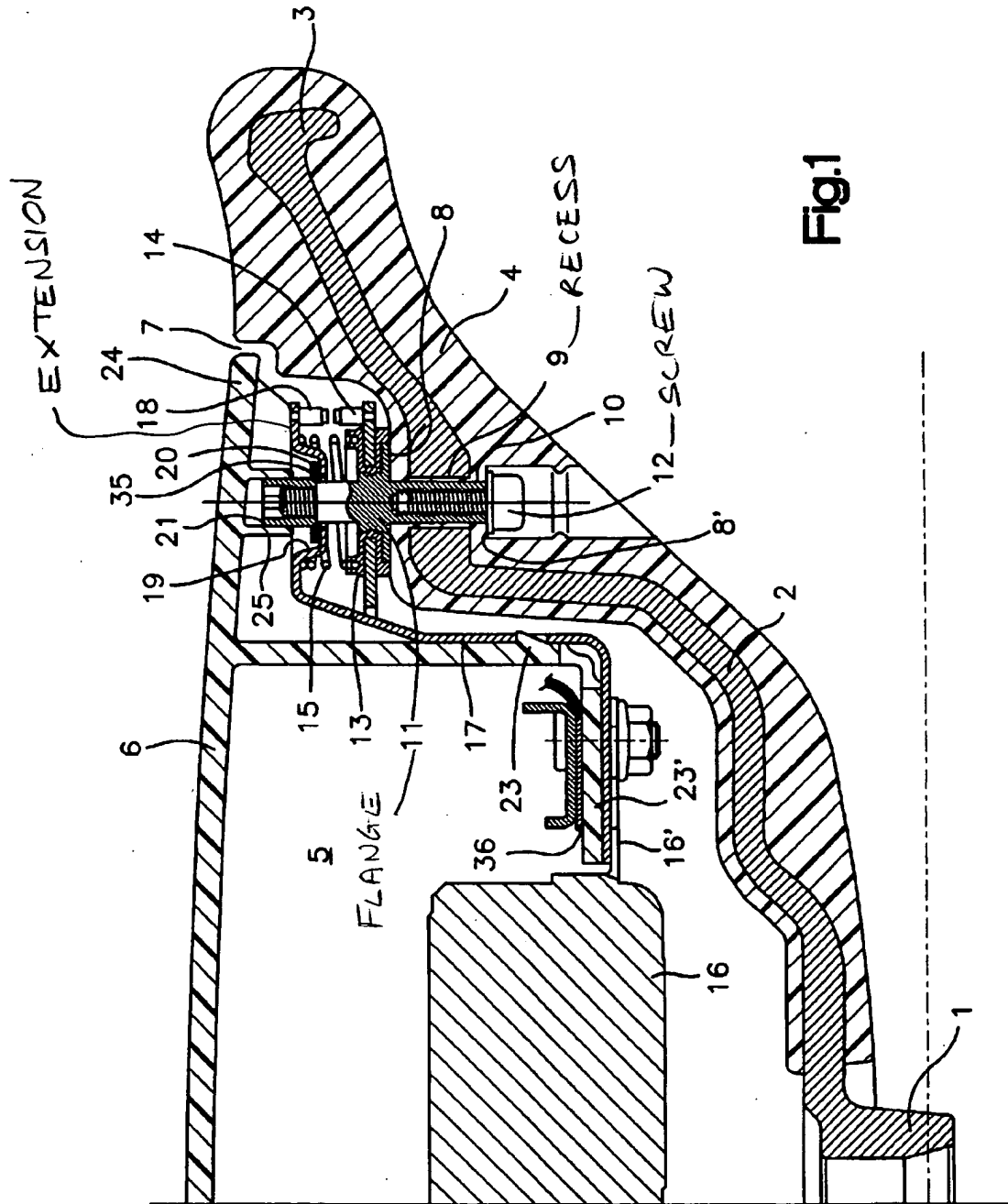
Luong

October 25, 2004

A handwritten signature in black ink, appearing to read 'Vinh T. Luong', with a long horizontal flourish extending to the right.

Vinh T. Luong
Primary Examiner

ATTACHMENT # 1



ATTACHMENT # 1
PAGE 1 OF 3

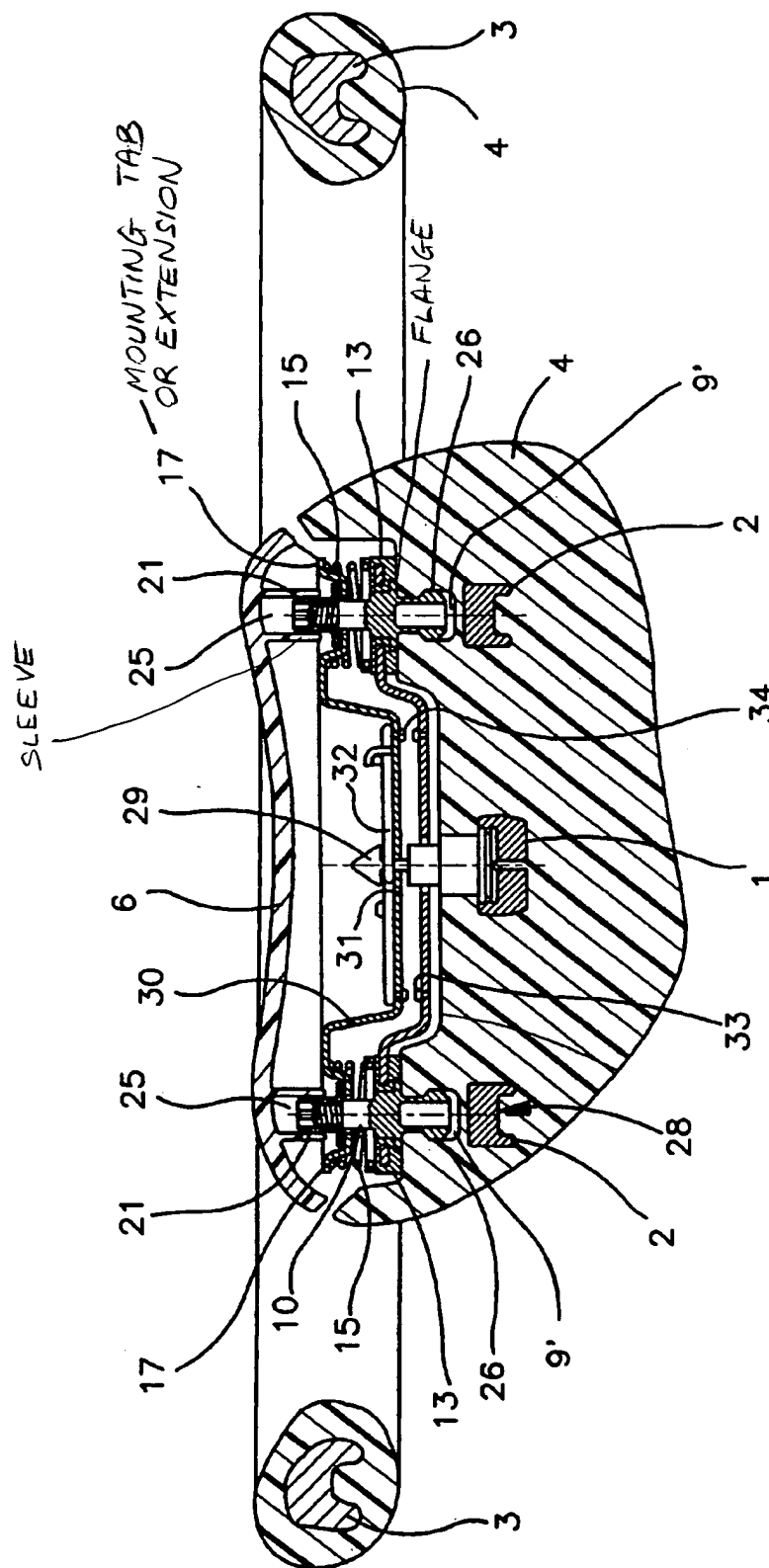


Fig. 2

ATTACHMENT # 1
PAGE 2 OF 3

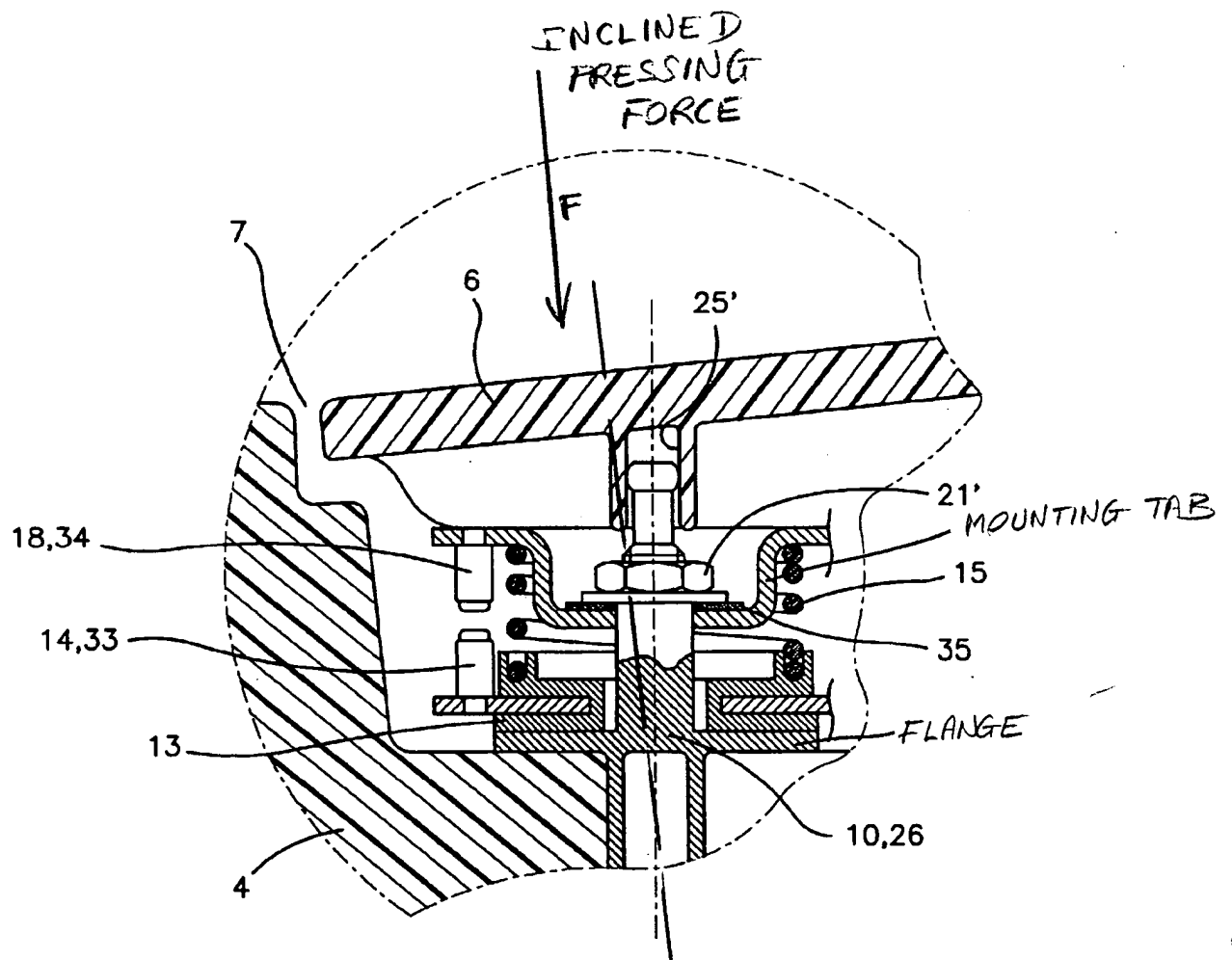


Fig.3

ATTACHMENT # 1
PAGE 3 OF 3

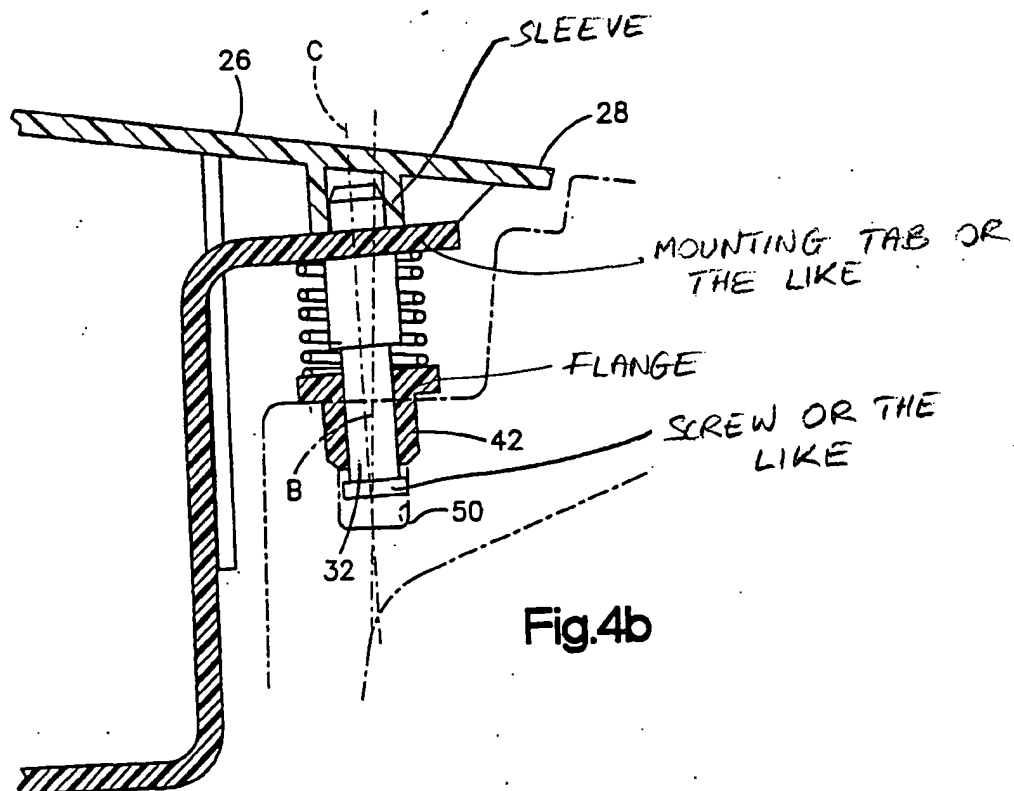
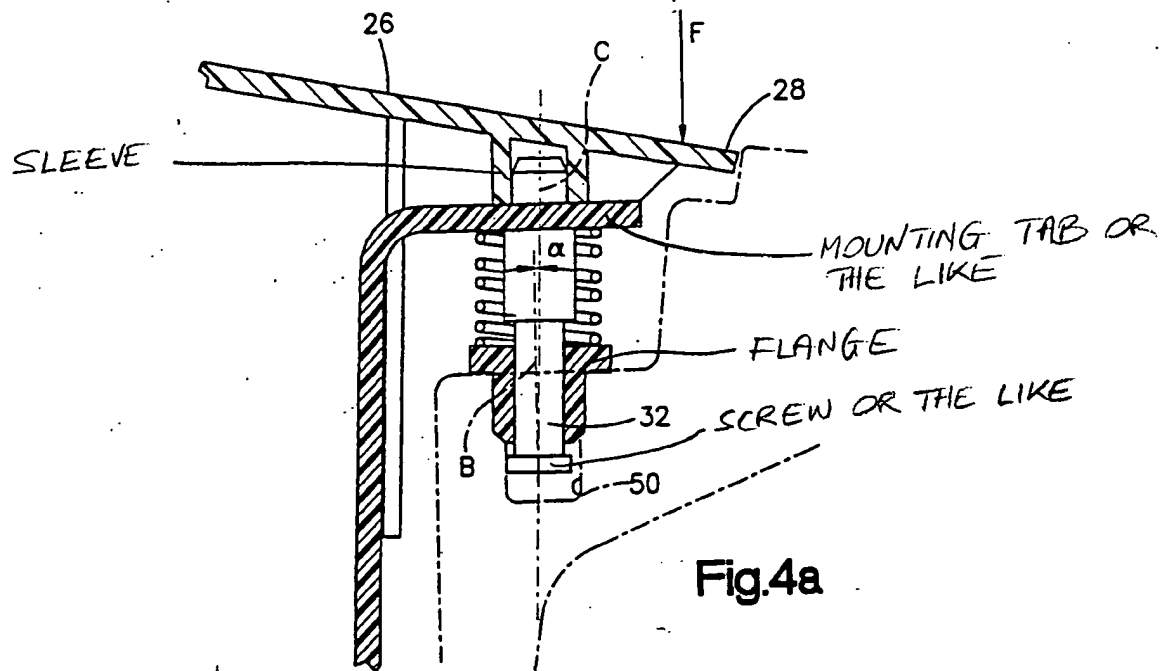
ATTACHMENT # 2



TRW(ASG)-6052

4/5 Replacement Sheet

6052TRW3



ATTACHMENT # 2
PAGE 1 OF 1